

VEZ Series

Features

- 4 ϕ ~ 6.3 ϕ , 105°C, 1,000 hours assured
- Low ESR capacitors
- Designed for surface mounting on high density PC board
- RoHS compliant
- AEC-Q200 compliant

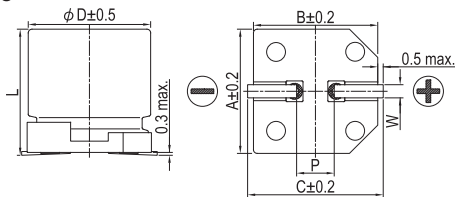


Marking color: Black

Specifications

Items	Performance																							
Category Temperature Range	-55°C ~ +105°C																							
Capacitance Tolerance	±20% (at 120 Hz, 20°C)																							
Leakage Current (at 20°C)	I = 0.01CV or 3 (μA) whichever is greater (after 2 minutes) Where, C = rated capacitance in μF, V = rated DC working voltage in V																							
Tanδ (at 120 Hz, 20°C)	<table border="1"> <thead> <tr> <th>Rated Voltage</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>Tanδ (max)</td> <td>0.28</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> </tr> </tbody> </table>	Rated Voltage	6.3	10	16	25	35	50	Tanδ (max)	0.28	0.24	0.20	0.16	0.14	0.12									
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Low Temperature Characteristics (at 120 Hz)	<p>Impedance ratio shall not exceed the values given in the table below.</p> <table border="1"> <thead> <tr> <th colspan="2">Rated Voltage</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Impedance Ratio</td> <td>Z(-25°C)/Z(+20°C)</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-55°C)/Z(+20°C)</td> <td>10</td> <td>7</td> <td>5</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	Rated Voltage		6.3	10	16	25	35	50	Impedance Ratio	Z(-25°C)/Z(+20°C)	4	3	2	2	2	2	Z(-55°C)/Z(+20°C)	10	7	5	3	3	3
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Shelf Life Test	Test time: 1,000 hours; other items are the same as those for the Endurance.																							
Ripple Current and Frequency Multipliers	<table border="1"> <thead> <tr> <th>Frequency(Hz)</th> <th>50, 60</th> <th>120</th> <th>1k</th> <th>10k up</th> </tr> </thead> <tbody> <tr> <td>Multiplier</td> <td>0.64</td> <td>0.8</td> <td>0.93</td> <td>1.0</td> </tr> </tbody> </table>	Frequency(Hz)	50, 60	120	1k	10k up	Multiplier	0.64	0.8	0.93	1.0													
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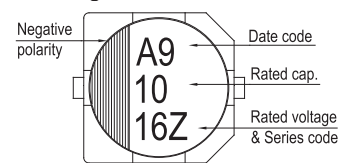
Diagram of Dimensions



Lead Spacing and Diameter

φD	L	A	B	C	W	P ± 0.2
4	5.3 ± 0.2	4.3	4.3	5.1	0.5 ~ 0.8	1.0
5	5.3 ± 0.2	5.3	5.3	5.9	0.5 ~ 0.8	1.5
6.3	5.3 ± 0.2	6.6	6.6	7.2	0.5 ~ 0.8	2.0
6.3	7.7 ± 0.3	6.6	6.6	7.2	0.5 ~ 0.8	2.0

Marking



Dimension: φD × L(mm)

Ripple Current: mA/rms at 100k Hz, 105°C

Impedance: Ω/ at 100k Hz, 20°C

Dimension and Permissible Ripple Current

Rated Volt. (V _{DC})	Cap. (μF)	Contents	6.3V (0J)			10V (1A)			16V (1C)			25V (1E)			35V (1V)			50V (1H)					
			φD×L	Imp.	mA	φD×L	Imp.	mA	φD×L	Imp.	mA	φD×L	Imp.	mA	φD×L	Imp.	mA	φD×L	Imp.	mA			
1.0	010																	4×5.3	5.0	30			
2.2	2R2																	4×5.3	5.0	30			
3.3	3R3																	4×5.3	5.0	30			
4.7	4R7																	5×5.3	3.0	50			
10	100				4×5.3	3.20	65	4×5.3	3.20	65	4×5.3	3.20	65	4×5.3	3.20	65	4×5.3	3.20	65	6.3×5.3	2.0	70	
22	220		4×5.3	3.20	65	5×5.3	1.50	110	5×5.3	1.50	110	6.3×5.3	0.85	170	6.3×5.3	0.85	170	6.3×5.3	0.85	170	6.3×5.3	2.0	70
33	330		5×5.3	1.50	110	5×5.3	1.50	110	6.3×5.3	0.85	170	6.3×5.3	0.85	170	6.3×5.3	0.85	170	6.3×5.3	0.85	170	6.3×7.7	1.0	170
47	470		5×5.3	1.50	110	6.3×5.3	0.85	170	6.3×5.3	0.85	170	6.3×5.3	0.85	170	6.3×7.7	0.50	255						
100	101		6.3×5.3	0.85	170	6.3×5.3	0.85	170	6.3×5.3	0.85	170	6.3×7.7	0.50	255									
150	151		6.3×7.7	0.50	255	6.3×7.7	0.50	255	6.3×7.7	0.50	255												
220	221		6.3×7.7	0.50	255	6.3×7.7	0.50	255	6.3×7.7	0.50	255												

Part Numbering System

VEZ Series	10μF	±20%	16V	Carrier Tape	4 φ × 5.3L	General Purpose
VEZ	100	M	1C	TR	-	0405
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Package Type	Terminal Type	Case Size

Note: For more details, please refer to "Part Numbering System - SMD Type" on page 106.